

### ABSTRACT OF THE DISCLOSURE

A method, system and computer readable medium for an automatic focusing device including an optical system including receiving a light flux from an object to be photographed, the received light flux being passed through an optical system having a focusing lens system to form an image of the object and converting the received light flux into an output image signal; converting the image signal to output digital image data; outputting luminance data according to the digital image data as an automatic exposure (AE) evaluation value; setting at least an area of an imaging screen of an imaging device as an automatic focusing (AF) area; determining if the AE evaluation value is smaller than a predetermined value and setting an enlarged AF area as the AF area when the AE evaluation value is smaller than the predetermined value; integrating high frequency components of luminance data of image data in the AF area and outputting resulting data as an AF evaluation value; sampling AF evaluation values while moving the focusing lens system; and determining if the device is in focus based upon a result of the sampled AF evaluation values and driving the focusing lens system to a focusing position when the device is not in focus.